

ABSTRACT OF THE DISCLOSURE

An apparatus and method for fabricating corrugated composite stiffeners provides a base tool having grooves formed in an outer surface and a roller having a rotating shaft and a removable, lobed, elastomeric member surrounding the shaft. The lobes of the elastomeric member form a radial array around the shaft and match the contours of the grooves in the base tool. A section of prepreg fabric is placed between the roller and the base tool, and the roller is rotated to sequentially engage the lobes with the grooves, the lobes pressing the fabric into the grooves, the fabric conforming to the contours of the grooves. Several layers of fabric are applied, then the elastomeric member is released from the shaft, laid out flat, and placed on the fabric on the base tool, the lobes locating in the grooves. The base tool, fabric, and elastomeric member are enclosed in a vacuum bag and heated to cure the fabric.